

PATENT ABSTRACTS OF JAPAN

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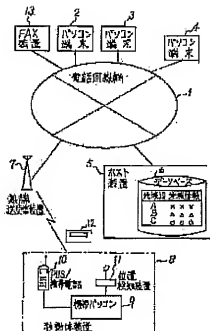
KAWAMURA TOYOGO

(54) INFORMATION DELIVERY SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an information delivery system by which information service is effectively executed while flexibly dealing with the wide range of movement of users accessing the delivery information through a network, the request of scrupulous information corresponding to a movement destination area and the diversification of communication means usable by the users.

SOLUTION: This system is provided with a public portable radio communication equipment and comprises a mobile device 8 for exchanging information by the public portable radio communication equipment and a host device 5 connected to a telephone line network 1 having a communication function with the equipment. The host device 5 is provided with a database 6 in which area information is stored and an area information retrieving and originating equipment for retrieving the correspondent area information from the database based on position information which is received from the mobile device 8 and executing an originating processing to the mobile device 8. The mobile device 8 is provided with a position information detecting device 11 for detecting a present position, a communication controller transmitting information of the present position which is detected by the device 11 to the host device 5 and receiving area information from the host device 5 and a display device for displaying area information.



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CLAIMS

[Claim(s)]

[Claim 1] having the following -- ***** -- an information distribution system characterized by things.

A mobile device which has a public walkie-talkie communication apparatus, and transmits and receives information with a public walkie-talkie communication apparatus.

A database with which it consisted of a host device connected to a telephone network with a communication function with a public walkie-talkie communication apparatus, and a host device stored area information of contents matched with the area for every every place region.

A position information detection apparatus which searches from a database area information applicable based on position information received from a mobile device, and is provided with area information search and a sender which performs processing which sends to a mobile device and with which a mobile device detects a self current position.

A communication control unit which transmits information on a current position detected with a position information detection apparatus to a host device, and receives area information from a host device, and a display which displays received area information.

[Claim 2] An information distribution system comprising:

A terminal connected to a network.

A mail server which manages a mail arrival E-mail to a terminal.

A function which notifies information on a mail arrival E-mail to a user's pager, PHS, or a cellular phone by conditions which it became from a mail transfer

server which distributes information on a mail arrival E-mail managed with a mail server to a user of a terminal, and to which a mail transfer server was set beforehand.

[Claim 3]An information distribution system characterized by having a function which outputs information on a mail arrival E-mail to a user's FAX equipment by conditions to which a mail transfer server was beforehand set in claim 2.

[Claim 4]Have the following and a computer for game information distribution, While managing collectively game information received from an administrative computer of each game center, An information distribution system which is provided with a function distributed to an administrative computer of each game center, and is characterized by an administrative computer of each game center displaying game information of a game machine in each distributed game center.

An administrative computer of two or more game centers combined in a network.

A function which transmits game information which consists of a computer for game information distribution which distributes game information to each game center, and as for which an administrative computer of each game center shows a game situation of a game machine in a self-game center to a computer for game information distribution.

A function which displays game information.

[Claim 5]Claim 4, wherein it had the following, and a computer for distribute information is provided with a function which distributes reserved information to an administrative computer of each game center while it manages collectively reserved information received from an administrative computer of each game center.

A function to receive a request to print out files of a game machine based on game information of a game machine of each game center where an administrative computer of each game center was distributed.

A function which transmits reserved information to a computer for game information distribution.

[Claim 6]An information distribution system which said network is the Internet, and said game machine is a pachinko stand in claim 4 or claim 5, and is characterized by said game information being reward-balls information.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention]This invention relates to the information distribution system with which it was improved for raising the ease and convenience of access by the user who moves especially about the system which distributes predetermined information to the user terminal in a network. [information]

[0002]

[Description of the Prior Art]With personal computer communications in recent years and the spread of the Internet, the information and telecommunications between remote computers are used increasingly briskly. On the other hand, in addition to the public telephone switching network by the conventional cable, SHIEA with big public walkie-talkie communications networks, such as a pager, PHS, a cellular phone, is increasingly occupied as available

communication media.

[0003] There are not few cases where it is necessary to obtain the newest information relevant to the area of a movement destination or the area of a current position during movement for business, sightseeing, etc., and to act based on the information on the other hand. However, such even case, the user is carrying only means of communication, such as a pager, PHS, a cellular phone, in many cases, and acquisition of the information from the Internet etc. is difficult.

[0004]

[Problem(s) to be Solved by the Invention] A user's broad-based movement which this invention accesses via a network at delivery information, it is flexibly adapted for a demand of the skin top paddle information corresponding to a movement destination area, and the diversity of a means of communication usable in a user, and aims at providing the information distribution system which can perform an information service effectively.

[0005]

[Means for Solving the Problem] In an information distribution system, this invention to the conventional telephone network in addition, by supposing that a communications network of public walkie-talkie communication apparatus, such as a pager, PHS, a cellular phone, is also available, while expanding and introducing more flexibility into communication between users who move, database management of the delivery information is carried out according to a regional attribute, and distribution and use of efficient information which are adapted for a user's local movement are enabled.

[0006] An information distribution system by this invention is constituted as follows.

(1) A mobile device which has a public walkie-talkie communication apparatus, and transmits and receives information with a public walkie-talkie communication apparatus, consist of a host device connected to a telephone network with a communication function with a public walkie-talkie communication apparatus, and a host device, a database which stored area information of contents matched with the area for every every place region, search from a database area information applicable based on position

information received from a mobile device, have area information search and a sender which performs processing which sends to a mobile device, and a mobile device, having a position information detection apparatus which detects a self current position, a communication control unit which transmits information on a current position detected with a position information detection apparatus to a host device, and receives area information from a host device, and a display which displays received area information -- ***** -- it is characterized by things.

(2) A terminal connected to a network, and a mail server which manages a mail arrival E-mail to a terminal, consist information on a mail arrival E-mail managed with a mail server of a mail transfer server distributed to a user of a terminal, and a mail transfer server, by conditions set up beforehand, it has a function which notifies information on a mail arrival E-mail to a user's pager, PHS, or a cellular phone.

(3) In the preceding clause (2), a mail transfer server is provided with a function which outputs information on a mail arrival E-mail to a user's FAX equipment by conditions set up beforehand.

(4) An administrative computer of two or more game centers combined in a network, consist of a computer for game information distribution which distributes game information to each game center, and an administrative computer of each game center, a function which transmits game information which shows a game situation of a game machine in a self-game center to a computer for game information distribution, it had a function which displays game information, and a computer for game information distribution is provided with a function which distributes reserved information to an administrative computer of each game center while it manages collectively game information received from an administrative computer of each game center.

(5) In the preceding clause (4) an administrative computer of each game center, a function to receive a request to print out files of a game machine based on game information of a distributed game machine of each game center, have a function which transmits reserved information to a computer for game information distribution, and a computer for distribute information,

While managing collectively reserved information received from an administrative computer of each game center, Having a function distributed to an administrative computer of each game center, an administrative computer of each game center performs request-to-print-out-files management of a game machine in a self-game center based on distributed reserved information.

(6) In the preceding clause (4) or (5), said network is the Internet, said computer for game information distribution is a provider, said game machine is a pachinko stand, and it is characterized by said game information being reward-balls information.

[0007]An outline of an information distribution system by this invention is shown in drawing 1. In drawing 1, 1 is a telephone network and computer networks, such as personal computer communications and the Internet, are built.

[0008]2, 3, and 4 are a user's personal computer terminals. 5 is a host device and serves management of delivery information, transmission, etc. It may have functions, such as a provider of the Internet, a network database server, and a mail server.

[0009]6 is a database of delivery information and is managed accessible by area information. 7 is a radio-transmission-and-reception device, and in order to communicate among public walkie-talkie communication apparatus, such as a pager, PHS/cellular phone, it is combined with the telephone network 1.

[0010]8 is a mobile device and is information machines and equipment which a user is carrying or mounting. 9 is a portable personal computer.

[0011]10 is PHS/cellular phone. 11 is a position detecting device, for example, detects a self position using a GPS Satellite.

[0012]12 is a pager which a user holds. 13 is FAX equipment which a user of the personal computer terminal 2 is using. Next, a function of a system of drawing 1 is explained.

[0013]The host device 5 has managed information on a database, for example, an E-mail, by local ID. A user of the mobile device 8 wants to check during movement an E-mail from a customer which carries out the whereabouts to information for every area of a movement destination, for

example, an area of a movement destination. By operating the position detecting device 11 of the mobile device 8, the portable personal computer 9 detects a current position of the mobile device 8, and transmits the position information to the host device 5 via the radio-transmission-and-reception device 7 and the telephone network 1 from PHS / cellular phone 10. The host device 5 identifies local ID applicable by position information on the mobile device 8, searches a mail arrival E-mail of local ID applicable from the database 6, creates a list of mail arrival E-mails of search results, and transmits to the mobile device 8. A user of the mobile device 8 chooses an E-mail which wants to check the contents further from a list of mail arrival E-mails displayed on a screen of the portable personal computer 9, requires of the host device 5, and makes the contents of e-mail transmit.

[0014]Although a user under movement does not hold the mobile device 8, when only PHS / cellular phone 10, and the pager 12 are being carried, PHS / cellular phone 10, or the pager 12 can be made to notify incoming information of a predetermined E-mail by setting a notification condition as the host device 5 beforehand.

[0015]A facsimile can be made to notify incoming information of an E-mail automatically to a user's FAX equipment 13 by carrying out conditioning to the host device 5 beforehand in a similar manner.

[0016]Furthermore, the database 6 of the host device 5 should summarize management information of local disposal of business affairs of each personal computer terminals 2, 3, and 4, and distributes the summarized management information to each personal computer terminals 2, 3, and 4, a user in each personal computer terminals 2, 3, and 4 -- the whole management information -- reference -- it can be made available. For example, as an administrative terminal in a pachinko parlor of an area which is different in each personal computer terminal, respectively, reward-balls information for every game machine of each pachinko parlor is brought together in the database 6 of the host device 5, and it is displayed on a terminal of each pachinko parlor, respectively. Thereby, a user gets to know a store and a pachinko stand out of which a ball has come well, can move to a store from a store, or can reserve a pachinko stand of other stores now.

[0017]

[Embodiment of the Invention] Drawing 2 shows the example of composition of the area information distribution system to the mobile by 1 embodiment of this invention.

[0018] In drawing 2, telephone networks, such as NTT, and 22 21 The Internet equipment, 23 Database devices, such as RDB (relational database), Data input and updating devices, such as a personal computer, and 25 24 Information retrieval and senders, such as a WWW server, Network connection apparatus, such as a router, and 27 26 A radio-transmission-and-reception device of the base station of PHS/cellular phone, The mobile device by which 28 is carried in carrying or a car by a user, and 29 Simplicity radio communication apparatus, such as PHS and a cellular phone, A storage device and 33 are information-display playback equipment which carries out the repeat display of the Information accumulated temporarily [information] accumulate temporarily the communication control unit which performs control of transmission of information and reception in the procedure predetermined [30] in position detecting devices, such as a GPS receiving set, a gyro device, and car navigation, and 31, and the information which 32 received.

[0019] Drawing 3 shows the example of application of the area information distribution system of drawing 2. In drawing 3, the mobile device 28 is beforehand connected to the Internet, ** The information which had transmitted the position information detected using the GPS Satellite every fixed time, and the radio-transmission-and-reception device 27 of the base station received is transmitted to the Internet equipment 22 of the information dispatch server accessed on ** Internet via the telephone network 21. The Internet equipment 22 uses as a key position information of which ** reception was done, retrieves a neighboring sightseeing spot and institution, shopping information, etc. from a region information database, and disseminates them to the mobile device 28. The mobile device 28 once accumulates the information of which ** reception was done, and reproduces and displays it if needed.

[0020] Thus, according to the position of the mobile which changes every moment, the user can access only related information automatically, can

receive, and can refer to only required information efficiently. Advertisement can be effectively performed in the car by carrying a mobile device in a taxi or a bus and distributing the advertisement information of the neighborhood store according to a movement zone, etc.

[0021]The newest area information is managed in a unified manner by the information dispatch server, and the mobile device can acquire timely the information needed at the places arbitrary without a burden which accumulate too heavy information, and can be used.

[0022]A mobile device communicates with an information dispatch server for every fixed time, but storage and preservation of the received area information is carried out, and communication cost will become cheap in order to carry out reproduction use. Drawing 4 shows the example of composition of the embodiment which notifies the information on a mail arrival E-mail to the pager of the user who is not carrying the personal computer, PHS/cellular phone, or FAX equipment, when delivery information is an E-mail.

[0023]In drawing 4, the mail server with which 34 performs an Internet network and 35 performs the sending and receiving of an E-mail, and 36 are mail transfer servers which offer service which transmits the information on an E-mail that a message was received in the mail server 35 to a user's terminal etc. As for telephone exchange network and 39, 37 is [PHS/cellular phone, and 41] FAX equipment a pager and 40 a modem and 38.

[0024]A user is based without the existence of specification, such as the conditions set up beforehand, for example, the existence of transmission, the destination, a transfer time zone, existence of the notice of an e-mail list, an e-mail addresser, a title, and reply important point mail, and the mail transfer server 36 performs transmission processing.

[0025]When the destination is a pager, only the title of a mail arrival E-mail is notified. If arrival of e-mail is first notified using synthesized speech and a user specifies by button grabbing etc. when the destinations are PHS/cellular phone, the contents of e-mail will be read out next.

[0026]When the destination is FAX equipment, the list information of received mail is first notified by FAX, and the contents are sent out by FAX by next specifying the arbitrary mails under list by button grabbing of a telephone.

[0027]Even If it is in the environment where a user cannot use a terminal on the way, by this, arrival of an E-mail can be known immediately and it can avoid conditioning performing the notice about unnecessary mail.

[0028]Drawing 5 shows the example of composition of the reward-balls information distribution system of an embodiment which summarizes the reward-balls information on a pachinko parlor, and is distributed to each store. In drawing 5, the provider whom 42 equipped with the Internet network and 43 equipped with WWW server 43a for reward-balls distribute information, and 44, 45 and 46 are LAN (local network) of pachinko parlor A, B, and C, respectively. In LAN of each pachinko parlor, the reward-balls management host which 47 makes a pachinko stand and 48 makes a reward-balls monitor and to whom 49 carries out central control of the reward balls of each pachinko stand, and 50 are routers which connect the terminal of LAN to an Internet network.

[0029]Although the server 43a for reward-balls distribute information is formed in the provider 43, WWW server 43a may be made to become independent on a machine in the example of a graphic display. Although a WWW server is application with the function to choose and search the accumulated text information besides [which generally provides the information described in HTML (hypertext description language)] a function with the demand from a user, a request-to-print-out-files controlling function, a credit settlement function, etc., Here, it uses for accumulation of reward-balls information, distribution, and a request to print out files.

[0030]In drawing 5, the reward-balls management host 49 of each pachinko parlor A, B, and C, Supervising the reward balls and stand reserved information of each pachinko stand 47 of self-Inside of a shop, reward-balls information and stand reserved information are uploaded with Internet network 42 with a certain time interval to the provider's 43 WWW server 43a for reward-balls distribute information (A1, B1, C1). WWW server 43a for reward-balls distribute information distributes those information to each store while carrying out accumulation management of the reward-balls information and stand reserved information which were uploaded from each store collectively (A2, B-2, C2). The display of the reward balls / stand reserved

information distributed to each store is enabled by the easy operation for the screen of the reward-balls monitor 48 of each pachinko stand 47 of inside of a shop.

[0031]The visitor of each pachinko parlor first the pachinko stand which plays a game the time of *****; and when the appearance of a ball is bad, The reward-balls information on a self-store or other stores can be displayed on the screen of the reward-balls monitor 48 of the pachinko stand 47, when the stand which the appearance of a ball seems to have is found in other stores, a salesclerk is got to be able to do request-to-print-out-files managing acceptance, and it can move to the store. For example, if the stand of B store or C store is reserved in A store, after uploading the stand reserved information from A store to WWW server 43a for reward-balls distribute information, it will be distributed to each store including B store and C store, and a stand reservation process will be performed in B store and C store with the stand of a booking object based on the stand reserved information.

[0032]Thus, the visitor of a pachinko parlor becomes possible [that thing / making it like and playing a game / which is one store] about two or more pachinko parlors connected in the network, and can raise the volition of the visitor to a game.

[0033]

[Effect of the Invention]According to the information distribution system of this invention, access to information becomes easy by diversifying the means of communication of the delivery information to the user under movement, By managing delivery information according to the area, it becomes possible to sort out only the information which suited the area of the movement destination, and to provide for a user, and a user is the future of movement and can obtain the latest information to need by real-time and low communication cost. By sucking up on-line the information from which the system of further two or more areas changes every moment, and re-distributing to the system of an every place region, a user can be told about the situation of other areas real time, and the user can perform optimal movement.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is a schematic diagram of the information distribution system of this invention.

[Drawing 2] It is an explanatory view showing the example of composition of the area information distribution system to the mobile by 1 embodiment of this invention.

[Drawing 3] It is an explanatory view showing the example of application of the area information distribution system to the mobile by 1 embodiment of this invention.

[Drawing 4] It is an explanatory view showing the example of composition of the distribution system by 1 embodiment of this invention which notifies a user of a mail arrival E-mail with a pager etc.

[Drawing 5] It is an explanatory view showing the example of composition of the reward-balls information distribution system by 1 embodiment of this invention.

[Description of Notations]

1: Telephone network

2, 3, 4: Personal computer terminal

- 5: Host device
- 6: Database
- 7: Radio-transmission-and-reception device
- 8: Mobile device
- 9: Portable personal computer
- 10: PHS/cellular phone
- 11: Position detecting device
- 12: Pager
- 13: FAX equipment

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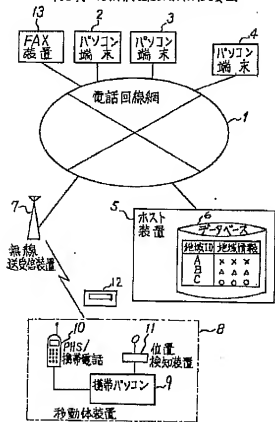
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DRAWINGS

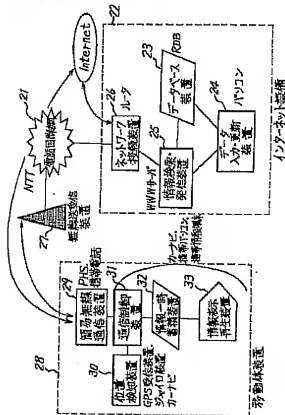
[Drawing 1]

本発明による情報配信システムの概要図



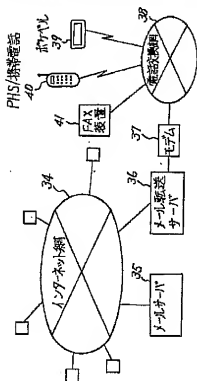
[Drawing 2]

本発明の実施の形態による移動体の地域情報配信システム
の構成例を示す説明図



[Drawing 3]

利用者に着信電子メールとボイベル等で通知する本発明の
実施の形態による情報通信システムの構成例を示す説明図



[Drawing 5]

